

Jeopardy Assessment for the Butler's Gartersnake

Stu's Flooring Store Development

City of Greenfield

Milwaukee County, Wisconsin

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Background

The state-threatened Butler's gartersnake is the smallest of the five Wisconsin gartersnake species. Both sexes of this species reach maturity during their second full year and females deliver 4-19 live-born young in mid to late summer. The Butler's garter snake is a colonial species that is restricted to several southeastern counties in Wisconsin. This species requires a moderately open to open canopy habitat, preferably with both upland and wetland habitat. Butler's naturally hibernate in open-canopy wetlands (sedge meadows, fringes of cattail marshes, etc.) but are also known to occupy sites that provide other means for successful overwintering (i.e. old landfills where conditions provide access below the frostline and where adequate moisture exists).

The Butler's gartersnake was listed as a state-threatened species in 1997 for two primary reasons: extensive habitat loss within its very limited range; intergradation with a similar species, the eastern plains gartersnake *Thamnophis radix*. Habitat loss leads the list of threats. In addition, habitat fragmentation has caused populations to become isolated, potentially compromising their genetic integrity. Additional habitat losses will further hamper recovery efforts unless enough sites can be identified and preserved to perpetuate this species.

Intergradation with the plains gartersnake likely continues at the periphery of the Butler's known range, particularly at the southern and western edges of its range, but is expected to lessen as habitat fragmentation isolates populations. This will, in turn, create other management challenges in dealing with the long-term survival of the Butler's gartersnake.

Surveys and monitoring since the snake's listing in 1997 reveal that Butler's can occur in large numbers on relatively small sites (i.e. 400+ snakes detected on a 20-acre site with less than 50% suitable [open canopy] habitat). At sites where Butler's have been well surveyed, their populations tend to show a healthy age-class structure, indicating that regular recruitment is occurring at those locations. Surveys have also demonstrated that Butler's can occur on disturbed and degraded sites.

Range limits for the Butler's gartersnake may be further refined as additional information on genetics and taxonomy becomes available. Changes in range limits may necessitate re-assessing jeopardy policies, by either relaxing or tightening allowable take.

In summary, the Butler's gartersnake is a fast-maturing species with potentially high annual recruitment. The habitats required for this species have and are continuing to be lost due to development pressures within southeastern Wisconsin. Relatively large populations can potentially be sustained on relatively small sites (under 20 acres), which may or may not be degraded, but as these sites become further isolated, their populations may suffer from genetic stagnation. The long-term future of this species remains unclear and the protection of existing habitat seems essential to achieving stability and recovery.

Jeopardy Assessment

The Department hereby determines that the activities resulting from the construction of the Stu's Flooring Store, associated parking areas and stormwater retention areas will result in minimal taking of the Butler's gartersnake. However, the conservation measures listed below are required of Loomis Development LLC to minimize incidental take and allow this species to persist at this location. With the implementation of these measures, the department has determined that the proposed project is not likely to jeopardize the continued existence or recovery of the state population of these snakes or the whole plant-animal community of which they are a part.

Required Conservation Measures

The proposed Incidental Take authorization requires Loomis Development LLC to implement the following conservation measures for the Stu's Flooring Store development:

1. Butler's gartersnake removal will be required from an area encompassing a buffer area extending 180 feet south of the delineated wetland boundary in areas of primarily open canopy habitat. Removals will be required until the rate of removal drops sufficiently to suggest that the majority of the snakes have been moved out of harms way.
2. Silt Fencing along the northern, eastern and western sides of the snake removal area will remain in place throughout construction, with the exception of small breach of fencing along the northern edge for 24 hours while a utility extension is installed.
3. Construction within the 180-foot snake buffer area described above will not occur until after the department authorizes the cessation of snake removals based on the above removals.
4. Loomis Development LLC must hire a qualified herpetologist to develop a Butler's gartersnake habitat restoration plan that will be implemented during and post construction to insure the protection, restoration and maintenance of the snake habitat at this location. The plan should include habitat restoration and stewardship, snake monitoring and possible mitigation. The department must approve this plan prior to any construction within known Butler's gartersnake habitat at this location.